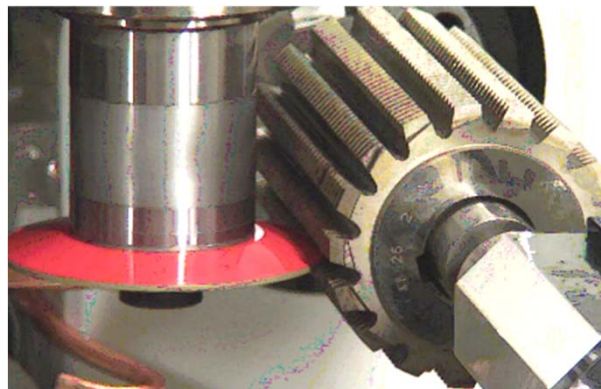











## Gear Hob resharpener (HSS)

A12-010

Gear Hobs can be sharpened in many ways using different grinding wheels and sharpening technologies. SCHNEEBERGER provides a number of possible solutions, based on more than 15 years experience in gear hob grinding technology. The given example was ground using a single cup form CBN wheel and box grinding cycle. Usual material removal rate hereby is about 0.2mm. For stiffer or coated materials, a usage of roughing and finishing wheel might be necessary and highly recommended. Usage of faster traverse rates can be considered in association to the processed gear hob material.



### 1. Cycletime for sharpening

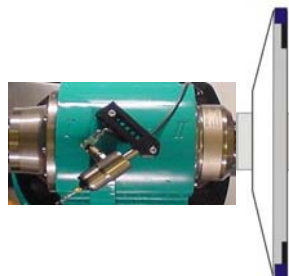
Tool specifications					
Diameter 100 mm, Z 22, Length 300 mm, Non-spiral					
Material HSS s390					
Operations					
Feed [mm/min]	2000	400	200	1500	2000
Infeed / cycle [mm]		0.005	1.000	0.075	0 - 0.005
Wheel speed [m/s]		33	33	33	33
Used wheels					
Grinding time [min]	0.5	1.0	1.0	48.0	7.0
Total cycle time	~ 57.5 min				

Roughing=6x0.075mm+1x0.05mm  
Finishing = 2x0 max. 2x0.005mm  
Total removal = 0.5mm

The mentioned cycle times are indicative. The material to be ground, different grinding wheels or other coolants can influence the cycle times considerably.

### 2. Used Grinding Wheels

6A2 / 12C9 90° CBN Ø175 B91



### 3. Machine and Software Requirements

Machines: 5 axes CNC grinder: Gemini DMR / Corvus GDS  
CNC Control: Fanuc 31i  
Coolant: Synthetic oil, pressure 6 bar  
Software: Quinto 5

Responsible Engineer: SIW, 03.2010

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